

**REMARKS**

Entry of the foregoing and further and favorable reconsideration of the instant application, pursuant to and consistent with 37 C.F.R. §§ 1.111, are respectfully requested.

**Status**

Claims 1-30 are pending in this application. *Office Action mailed November 29, 2006, Office Action Summary, Item 4.* Claims 1-11, 13, 14, 16, 17, 25, and 29 stand rejected. *Id. at Item 6.* Claims 12, 15, 18-24, 26-28, and 30 are objected to. *Id. at Item 7.*

**Summary of Claim Amendments**

By the foregoing claim amendments, Applicants have amended Claim 1 to further clarify Applicants' invention. Specifically, Applicants have amended Claim 1 to specify that Applicants' method provides a golf ball with a visual indication that at least one property of the golf ball has been altered due to the presence of water, comprising applying a water-activated mask that is altered to permit viewing of a covered indicator upon being subjected to water. Support for this amendment may be found throughout the Specification, and at least at Page 1, Lines 4-7; Page 1, Lines 10-14; Page 4, Lines 13-16; Page 8, Lines 4-20; and original Claim 1. Accordingly, no new matter has been added.

Further by the foregoing claim amendments, Applicants have amended Claims 2-4, 6-14, 19, and 20 to conform with the amendments made to Claim 1. These amendments are clerical/linguistic in nature. Support for these amendments may be found throughout the Specification, and at least at original Claims 1-4, 6-14, 19, and 20, as well as in the passages cited as support for amended Claim 1. Accordingly, no new matter has been added.

Finally by the foregoing amendments, Applicants have added new Claim 31. New Claim 31 sets forth the subject matter of prior Claim 12, albeit it in independent form. Support for new Claim 31 can be found throughout the Specification, and at least at former Claims 1 and 12. Accordingly, no new matter has been added.

**Allowable Subject Matter**

Applicants note with appreciation that the Examiner has indicated that “Claims 12, 15, 18-24, 26-28, [and] 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.” *Office Action mailed November 29, 2006, Page 2, Last Paragraph.*

**Rejections Under 35 U.S.C. § 102(b) and/or 35 U.S.C. § 103(a)**

Claims 1-11, 13, 14, 16, 17, 25, and 29 were rejected under 35 U.S.C. § 102(b) as purportedly anticipated by, or, in the alternative, under 35 U.S.C. § 103(a) as purportedly obvious over U.S. Patent No. 6,358,160 (“the ‘160 patent”) to Winskowicz. *Office Action mailed November 29, 2006, Page 2, Middle Paragraph.* According to the Examiner, “Winskowicz discloses a golf ball comprising a surface with indicia and a coating (masking layer) over the surface. Once the coating is penetrated the indicia will appear on the surface (fig 9). With respect to claims 2-5, the coating layer obviously includes all the limitations when exposed to water. The coating layer also includes a water activated binder since it is capable of being penetrated by water.” *Id.* This rejection is respectfully traversed.

**A. Purported Anticipation Under 35 U.S.C. § 102(b)**

“Invalidity based on ‘anticipation’ requires that the invention is not in fact new.”

*Verve, LLC v. Crane Cams, Inc.*, 311 F.3d 1116, 1120 (Fed. Cir. 2002) (quoting *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 299, 302 (Fed. Cir. 1995)). “A single reference must describe the claimed invention with sufficient precision and detail to establish that the subject matter existed in the prior art.” *Verve*, 311 F.3d at 1120 (citing *In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990)). Put differently, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

Applicants respectfully submit that the ‘160 patent fails to disclose each and every element of Claims 1-11, 13, 14, 16, 17, 25, and 29. For example, Claim 1 (from which Claims 2-11, 13, 14, 16, 17, 25, and 29 depend) is a method claim. Claim 1 is a method for providing a golf ball with a visual indication that at least one property of the golf ball has been altered due to the presence of water, comprising applying a water-activated mask that is altered to permit viewing of a covered indicator upon being subjected to water. **The method of Claim 1 requires applying a water-activated mask. Once the mask is activated with water, the indicator over which the mask was applied becomes viewable.** The mask may be referred to as an “opacification layer.” As Page 5, Lines 2-5 of the Specification state, “Under normal conditions the opacification layer blocks the view of the underlying surface. When the opacification layer is water-activated it becomes transparent or is removed, thus unmasking the underlying layer.” Page 5, Lines 7-9 of the Specification further state, “Depending on the type of physical operation involved, immersion of the golf ball for a

sufficiently long period of time causes the opacification layer to either be rendered transparent, to be removed, or to reduce its light-blocking characteristics.”

The ‘160 patent does not anticipate Claims 1-11, 13, 14, 16, 17, 25, and 29 because **the ‘160 patent is silent with regard to Applicants’ claimed water-activated unmasking of an indicator.** The invention of the ‘160 patent is summarized at Column 1, Line 59 through Column 2, Line 9 of the ‘160 patent:

In order to alleviate the problem of having to deal with balls which may have been immersed and recovered, in the subject invention a golf ball is provided which changes color, has imprinted writing which disappears or has some other indicia which changes after immersion to indicate that the ball has been immersed.

In the present invention, in one embodiment, imprints on the ball are made with water-activated ink which vanishes when it is exposed to water for long periods of time. In another embodiment, imprints on the ball are made with water-activated transparent ink which appears when it is exposed to water for long periods of time. The invention is thus used as an indicator of balls previously exposed to water . . . for one to several days in the bottom of a lake, pond, pool or other body of water. Such an indicator is used to alert golfers to potential changes in ball properties due to long water exposure times.

The instant application reiterates the attributes of the ‘160 patent when it states: “Note that U.S. Patent 6,658,160 utilizes water-activated ink which either appears or disappears upon the immersion of the golf ball in water.” *Page 3, Lines 18-19 of the Specification.*

Applicants’ instant application distinguishes the claimed invention from that of the ‘160 patent by explaining that “a golf ball with indicia or a particular recognizable color is **overlain with an opacification layer that provides a mask over the indicia or the colored ball . . .** The opacification layer when removed or otherwise made transparent, while providing for a change in the appearance of the golf ball upon water immersion, does not

need to have a layer or indicia which changes color in reaction to the infusion of water.”

*Page 8, Lines 4-11 of the Specification (emphasis added).*

The ‘160 patent does not disclose or suggest a method for providing a golf ball with a visual indication that a property has been altered where a water-activated mask is applied to an indicator, whereby upon activation the mask permits viewing of the covered indicator. Thus, the ‘160 patent does not anticipate Claims 1-11, 13, 14, 16, 17, 25, and 29. Applicants respectfully request withdrawal of the rejection of Claims 1-11, 13, 14, 16, 17, 25, and 29 under 35 U.S.C. § 102(b) over the ‘160 patent.

**B. Purported Obviousness Under 35 U.S.C. § 103(a)**

To establish a *prima facie* case of obviousness, (1) there must be some suggestion or motivation to modify the reference or combine teachings, (2) there must be a reasonable expectation of success, and (3) the prior art must teach or suggest all of the claim limitations. *See M.P.E.P. § 2142*. Applicants respectfully submit that a *prima facie* case of obviousness has not been made against Applicants’ Claims 1-11, 13, 14, 16, 17, 25, and 29 at least because the ‘160 patent fails to disclose or suggest Applicants’ methods employing water-activated masks that are altered to permit viewing of covered indicators, *i.e.*, the ‘160 patent fails to teach or suggest all of the limitations of Claims 1-11, 13, 14, 16, 17, 25, and 29. *See above*.

In view of the foregoing, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of Claims 1-11, 13, 14, 16, 17, 25, and 29 over the ‘160 patent.

Applicants take this opportunity to address the relationship between the '160 patent and the instant application. The claims of the '160 patent are broad, in that they use open-ended "comprising" language. In that regard, the claims of the '160 patent could be said to dominate Claims 1-31 in the instant application. A useful discussion of this is set forth in *In re Kaplan*, 789 F.2d 1574 (Fed. Cir. 1986), attached for the Examiner's convenience:

By domination we refer, in accordance with established patent law terminology, to that phenomenon, which grows out of the fact that patents have claims, whereunder one patent has broad or "generic" claims which "reads on" an invention defined by a narrower or more specific claim in another patent, the former "dominating" the latter because the more narrowly claimed invention cannot be practiced without infringing the broader claim. To use the words of which the board seemed to be enamored, the broader claim "embraces" or "emcompasses" the subject matter defined by the narrower claim. In possibly simpler terms, one patent dominates another if a claim of the first patent reads on a device built or process practiced according to the second patent disclosure.

*In re Kaplan*, 789 F.2d at 1577. While the claims of the '160 patent may dominate Claims 1-31 of the instant application, the claims of the '160 patent neither anticipate nor render obvious Claims 1-31, at least because the '160 patent is silent with regard to Applicants' water-activated mask that is altered to permit viewing of a covered indicator upon being subjected to water.

**CONCLUSION**

It is respectfully submitted that all rejections have been overcome by the foregoing amendments and remarks. Thus, a Notice of Allowance is respectfully requested.

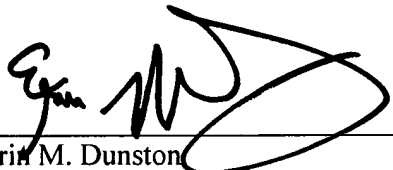
In the event that there are any questions relating to this Amendment and Reply Pursuant to 37 C.F.R. § 1.111, or to the application in general, it would be appreciated if the Examiner would contact Applicants' undersigned attorney by telephone at (202) 373-6000 so that prosecution of the application may be expedited.

The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2518.

Respectfully submitted,  
BINGHAM MCCUTCHEN, LLP

Date: March 29, 2007

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*SRI International, supra*, 775 F.2d at 1122-24, 227 USPQ at 587-88. It has not on this record been shown to have been clearly erroneous.

#### CONCLUSION

Kodak having failed to show that the judgment portions appealed from were based on clearly erroneous findings or errors in law, the appealed portions of the judgment are in all respects affirmed.

AFFIRMED.



In re Leonard KAPLAN and  
Wellington Epler Walker.

Appeal No. 85-2522.

United States Court of Appeals,  
Federal Circuit.

May 6, 1986.

Joint inventors appealed from decision of the United States Patent and Trademark Office Board of Patent Appeals and Interferences, rejecting claim in their patent application on grounds of double patenting. The Court of Appeals, Rich, Circuit Judge, held that joint inventors' claim for "Homogeneous Liquid Phase Process for Making Alkane Polyols" did not constitute double patenting.

Reversed.

#### 1. Patents $\S$ 120

Joint inventors' claim for "Homogeneous Liquid Phase Process for Making Alkane Polyols" did not constitute double patenting where claim was not obvious variation of one inventor's claim in prior patent. 35 U.S.C.A.  $\S\S$  102(e, g), 103, 112, 116.

#### 2. Patents $\S$ 165(5)

"Domination" refers to that phenomenon, which grows out of fact that patents have claims, whereunder one patent has broad or "generic" claim which "reads on"

invention defined by narrower or more specific claim in another patent, the former "dominating" the latter because more narrowly claimed invention could not be practiced without infringing the broader claim.

See publication Words and Phrases for other judicial constructions and definitions.

Steven T. Trinker, Danbury, Conn., argued for appellant. On brief, was Norman L. Balmer, Law Dept., Union Carbide Corp., Danbury, Conn.

Harris A. Pitlick, Associate Sol., Arlington, Va., argued, for appellee U.S. Patent and Trademark Office. With him on brief, were Joseph F. Nakamura, Sol. and Fred E. McKelvey, Deputy Sol.

Before RICH, Circuit Judge, NICHOLS, Senior Circuit Judge, and NIES, Circuit Judge.

RICH, Circuit Judge.

This appeal is from the decision of the United States Patent and Trademark Office (PTO) Board of Patent Appeals and Interferences (board) rejecting, under 37 CFR 1.196(b), the single claim of appellants' application serial No. 364,221, filed April 1, 1982, entitled "Homogeneous Liquid Phase Process for Making Alkane Polyols," on the sole ground of "double patenting, because it constitutes an improper extension of monopoly for an invention claimed by Kaplan." We reverse.

#### Background

The Kaplan and Walker application at bar and the cited Kaplan patent, No. 3,944,588, issued Mar. 16, 1976, to one of the appellants on an application filed Jan. 2, 1975, are both assigned to Union Carbide Corporation, the real party in interest. As is apparent, the Kaplan patent application was pending only about fourteen and a half months. It was copending with the great-grandparent of the application at bar, filed Sept. 30, 1975. Its title is "Catalytic Process for Polyhydric Alcohols and Derivatives." The Kaplan patent contains one independent claim and thirteen dependent



claims. The claims most relevant here are those incorporated in dependent claim 4, which is the only claim specifically relied on by the board to support its double patenting rejection. They read as follows (emphasis ours):

1. The process of making alkane diols and triols having from 2 to 8 carbon atoms in the molecule which comprises reacting in a homogeneous liquid phase mixture of hydrogen and oxides of carbon in the presence of a rhodium carbonyl complex and a trialkanamine borate at a pressure of from about 1000 psia to about 50,000 psia correlated with a temperature of about 100°C to about 375°C sufficient to produce said diols and triols.

2. The process of *claim 1* wherein the temperature is from about 100°C to about 300°C.

4. The process of *claim 2* wherein the reaction is effected *in the presence of an organic solvent*.

Among organic solvents disclosed and specifically claimed in the Kaplan patent are two known as "tetraglyme" (in more explicit nomenclature, dimethyl ether of tetraethylene glycol) and sulfolane. Two of the Kaplan dependent claims (10 and 11) individually name these specific solvents, respectively. No claim in Kaplan calls for a solvent *mixture*, which is significant with respect to the double patenting rejection for reasons which will appear. There are, however, a number of *examples* of mixed solvents in Table VI of the Kaplan patent specification, particularly Example 45, upon which the board relied. Example 45 is specific to a mixture of "Tetraglyme/sulfolane (65/10)." The heading of Table VI is "Triisopropanolamine Borate in Mixed Solvents."

Against this much of the background, we now reproduce the single claim on appeal of this *joint* application of Kaplan and Walker which stands rejected for double patenting in view of claim 4 of the Kaplan patent (emphasis ours):

*In the homogeneous liquid phase process of producing alkane polyols by the*

1. All applications involved in this case were filed and the Kaplan patent had issued before

reaction of oxides of carbon and hydrogen in the presence of a rhodium catalyst in which rhodium is complexed with carbon monoxide to provide a rhodium carbonyl complex at a temperature between about 100°C. to about 375°C. and a pressure between about 1000 psia to about 50,000 psia, *the improvement* which comprises effecting said reaction *in a solvent mixture of tetraglyme and sulfolane* under conditions whereby such solvent mixture is essentially inert and the *rate of formation of such alkane polyol is greater* than would be obtained by effecting said reaction under equal conditions using *tetraglyme or sulfolane* as the solvent.

It will be observed from a comparison of this claim with the Kaplan claims reproduced above that the Kaplan and Walker (joint) claim at bar is, generally speaking, defined as an improvement on the Kaplan (sole) catalytic process of producing alkane polyols (diols and triols) by reacting hydrogen and carbon oxides (e.g., carbon monoxide) in an organic solvent. The reason why the process using the solvent *mixture* of the appealed claim was not *claimed* in the Kaplan patent, although it is *disclosed* in the patent specification, is that Kaplan alone was not the inventor of that process; it was the *joint* invention of Kaplan and Walker and therefore the application on appeal was filed. The reason it was *disclosed* in Kaplan's patent was that it was part of the "best mode" of practicing Kaplan's catalytic process. See 35 U.S.C. § 112, first paragraph. ("The specification . . . shall set forth the best mode contemplated by the inventor of carrying out his invention.") By the time Kaplan filed his application he knew of ("contemplated") the Kaplan and Walker improvement on his own sole invention and therefore he disclosed it. It is a given, of course, that a sole inventor and joint inventors including the sole inventor are separate "legal entities," a legal proposition from which certain legal consequences flow, *In re Land and Rogers*, 368 F.2d 866, 879, 151 USPQ 621, 633 (CCPA 1966),<sup>1</sup> "such as who must

amendment of 35 U.S.C. § 116 by P.L. 98-622 of

apply for patent." It is worth remembering an axiomatic statement on the same page of the *Land and Rogers* case, which is also applicable here:

When the joint and sole inventions are related, as they are here, inventor A commonly discloses the invention of A & B in the course of describing his sole invention and when he so describes the *invention* of A & B he is not disclosing "prior art" to the A & B invention, even if he has legal status as "another." [the reference to "another" is to that word as used in 35 USC 102(e) and (g).]

Having been filed during the pendency of the Kaplan application, the present Kaplan and Walker application with its single mixture claim had a difficult time in the PTO resulting in the passage of much time. To summarize, there were two appeals to the board prior to the appeal which resulted in the decision now before us. Three continuation applications were filed under 37 CFR 1.60. The last of these, filed Jan. 9, 1981, is the present application and was appealed to the board from the examiner's rejections under §§ 102(g), 102(a), and 103 based on the Kaplan patent and a patent to Pruett. Declarations under 37 CFR 1.131 were filed by appellants and by Kaplan explaining who invented what and when.

The board reversed all of the examiner's grounds of rejection and entered its own rejection on the ground of double patenting, as stated in the first paragraph hereof, which rejection was adhered to on reconsideration. Applicants sought reconsideration by the board "rather than reopening prosecution as is permitted under 37 C.F.R. 1.196(b)." Appellants then took this ap-

peal. Therefore, this is the first review of the board's new rejection, explicated in its two opinions.

To indicate the reasoning of the board, we quote most of the paragraph of its initial opinion in which it made its new rejection (all emphasis ours):

Under the provisions of 37 CFR 1.196(b), we reject claim 1 [there is no other] on the ground of double patenting, because it constitutes an *improper extension of monopoly* for [sic, of] an invention claimed by Kaplan. ... [A]t least claim 4 of the Kaplan patent and appellant's claim 1 *embrace* common subject matter. Both claims are generic<sup>[2]</sup> and both claims *would be infringed* by a process which utilized rhodium and trialkanolamine borate as the catalyst and a *mixed solvent* as the organic solvent. Example 45 of the Kaplan patent clearly shows that the term solvent, as used in Kaplan's claims is intended to *embrace* the mixed solvent of Example 45. Further, appellants' claim 1 is sufficiently broad to *encompass* the use of a trialkanolamine borate in conjunction with the rhodium catalyst. Because both claims *embrace the same subject matter*, allowance of the instant application would amount to "double patenting of the improper extension of monopoly type" \* as termed by Judge Almond in *In re Thornton*, 57 CCPA 759, 769, 418 F.2d 528, 537, 163 USPQ 644, 650 (CCPA 1969).

\* We prefer the term "improper extension of monopoly" rather than "obviousness type double patenting" because the improper extension of monopoly occurs as a result of the *same*

sentence is the liberalization added by the 1984 amendment, which, had it been available, might have obviated the problem in this case.

2. Just what the board meant by saying "both claims are generic" is not clear to us. The claims speak for themselves. Kaplan's claim 4 defines the solvent used in the process, which is the limitation under discussion by the board, as "an organic solvent." Appellants' claim on appeal defines the solvent as "a solvent mixture of tetraglyme and sulfolane." Far from being "generic," the latter looks very much like a quite specific species of the genus "organic solvent."

Nov. 8, 1984, sec. 104(a), 98 Stat. 3384, now paragraph one of 35 U.S.C. § 116, which reads:

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.

The first sentence is the substance of the law at the times involved in this case. The second

subject matter being claimed. The rejected claims [sic] before us may well be drafted so broadly as to also embrace subject matter which is unobvious over the Kaplan patent. Nevertheless, for all practical purposes, the rejected claims [sic] serve to extend the monopoly for that subject matter *embraced* by the claims which is the same as that falling within the *embrace* of the Kaplan claims.

The board then discussed *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970), a case on which appellants as well as the PTO rely before us, and continued:

Accordingly, the instant claim, which reads on subject matter disclosed in and *embraced* by the claims of the Kaplan patent, cannot be granted absent filing of a *terminal disclaimer* to prevent undue timewise extension of monopoly.

The imposition of the terminal disclaimer originated with the board in conjunction with its origination of the double patenting rejection. From the dates set forth above, it will be seen that its effect would be to cause any patent issuing on the application at bar to expire on March 16, 1993, the expiration date of the Kaplan patent, assuming a term of 17 years, so that it would have a term of less than 7 years. Appellants have refused that option. And, of course, if the board's claim analysis is correct, appellants would gain little or nothing from the patent because the invention of the appealed claim, using the mixed solvents, is already *covered* by the Kaplan patent until the date of its expiration.

Following the filing of what the board characterized as "appellants' well-drafted Request for Reconsideration," of some 20 pages, the board wrote its second opinion, discussing further *In re Vogel* and some other CCPA double patenting opinions, emphasizing the following:

The Kaplan patent deliberately chose to claim the use of organic solvents as a vehicle for carrying out the claimed process.... The Kaplan patent discloses numerous solvents ... five of which are solvent mixtures and one of which is the tetraglyme/sulfolane solvent mixture which is claimed by appellant as the essential feature of their process. Surely, the tetraglyme/sulfolane solvent of Table VI *provides some of the support* for the term "organic solvent" as used in

claim 4 of the Kaplan patent. [Emphasis ours.]

....

As indicated by the patent, the term "solvent" includes the same mixed solvent claimed by appellants. Being in some aspects the same, the subject of appellants' claims [sic] would have been *prima facie* obvious from the subject matter of the claims in the Kaplan patent. Appellants' evidence of unexpected results teaches no more than that which is disclosed in the patent and which is properly considered supportive of the claims [sic], i.e., that mixed solvents give superior yields. Appellants' evidence does not overcome the *prima facie* case and a "terminal disclaimer" is necessary....

## OPINION

### *Double Patenting Generally*

[1] We reverse the board's double patenting rejection essentially for two reasons: (1) It has confused double patenting with "domination" which, by itself, does not give rise to "double patenting" and (2) it has used the disclosure of appellants' joint invention in the Kaplan patent specification as though it were prior art, which it is not, to support the obviousness aspect of the rejection.

[2] By domination we refer, in accordance with established patent law terminology, to that phenomenon, which grows out of the fact that patents have claims, whereunder one patent has a broad or "generic" claim which "reads on" an invention defined by a narrower or more specific claim in another patent, the former "dominating" the latter because the more narrowly claimed invention cannot be practiced without infringing the broader claim. To use the words of which the board seemed to be enamored, the broader claim "embraces" or "encompasses" the subject matter defined by the narrower claim. In possibly simpler terms, one patent dominates another if a claim of the first patent reads on a device built or process practiced according to the second patent disclosure. This common-

place situation is not, per se, double patenting as the board seemed to think. *In re Sarett*, 327 F.2d 1005, 1014, 1015, 140 USPQ 474, 482, 483 (CCPA 1964). (See particularly the quotations from E. Stringham's *Double Patenting* (1933) about terms such as "covered" and "embraced.")

With respect to the board's concern about "extension of monopoly," the PTO Solicitor's brief, while supporting the board, properly deplores its use of the ambiguous word "monopoly," preferring to use the more accurate and less emotion-generating expression<sup>3</sup> "extension of patent rights," explaining this in a footnote reading:

Both the board in this case and some prior decisions of the CCPA use the term "monopoly" in referring to the rights obtained through the grant of a patent. We prefer to refer to "patent rights" based on the rationale given by Chief Judge Markey in his article "Why Not the Statute?," 65 J.Pat.Off.Soc'y 331, 331-333 (1983).

See also *Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698, n. 3 (Fed.Cir.1983); *Kayton on Patents*, 2d ed., 1-27, "E. Patents: Property Versus Monopoly." Compare, *Robinson on Patents* (1890) Chapt. II §§ 11-44.

More to the point of the board's concern, however, one must inquire more closely than did the board: extension of what patent right? Any patent granted on the application at bar will have the single claim on appeal which is expressly limited to carrying out the Kaplan process using the specific solvent mixture of tetraglyme and sulfolane invented by appellants. Is this an extension of a patent on Kaplan's invention—Kaplan who never conceived of using that mixture? When Kaplan's (sole) patent expires, and assuming appellants get their joint patent, the world will still be free to use (so far as these two patents go) the Kaplan process so long as appellants' solvent mixture is not used in it. Of course, it

may be that everyone will want to use the improvement, but that is commonly the case when dominating patents expire with improvement patents still outstanding.

In further clarification of the distinction between domination and double patenting as currently understood, we repeat a passage from E. Stringham's *Double Patenting* at 207, previously quoted in *Sarett*:

One of the simplest, clearest, soundest and most essential principles of patent law, is that a later invention may be validly patented, altho [sic] dominated by an earlier patent, whether to the same or to a different inventor. No one will seriously deny the correctness of this statement, in principle. But it is incessantly lost sight of when an actual case must be decided.

"May be validly patented" of course implies that the "later invention" at least complies with the requirements for patentability found in the statute, namely, novelty, utility, and unobviousness as established by evidence of prior art, which a description of the later invention is not. Domination is an irrelevant fact.

The development of the modern understanding of "double patenting" began in the Court of Customs and Patent Appeals (CCPA) about the time of *In re Zickendraht*, 319 F.2d 225, 138 USPQ 22 (CCPA 1963), a rather unusual case in that there was no majority opinion because only two judges joined each of the two principal opinions. Neither *opinion* therein, therefore, can be regarded as controlling precedent in this court. That case is noteworthy primarily for the suggestion in a concurring opinion that the appellant might have disposed of the rejection by filing a terminal disclaimer under 35 U.S.C. § 253. This suggestion precipitated a steady stream of appeals over the next few years dealing with double patenting and the effectiveness or otherwise of terminal disclaimers which resulted in revisions of the PTO's rules,

3. The difficulty is that "monopoly" is used in different senses in patent and antitrust law, hence its ambiguity. Because of its antitrust connotations and association with illegality in connection therewith, it often evokes negative

reactions inappropriate to a dispassionate analysis of patent law problems. See *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1367, 220 USPQ 763, 776 (Fed.Cir.1984).

Cite as 789 F.2d 1574 (Fed. Cir. 1986)

guidelines, and Manual of Patent Examining Procedure on the matter. By the time of *In re Vogel*, 1970, the court saw fit to make a restatement of the law of double patenting which serves as a good starting place for deciding this case.

The first question treated in the *Vogel* restatement is whether the *same invention* is being claimed twice. If so, *Vogel* states, 35 U.S.C. § 101 prevents two patents from issuing. *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). We need not linger over this question as that is not the rejection made by the board here, notwithstanding what it said about what the claims "embrace."<sup>4</sup>

The second question, says *Vogel*, is: "Does any claim in the application define merely an obvious variation of an invention disclosed and claimed in the patent? In considering the question, the patent disclosure may not be used as prior art. *In re Boylan*, supra; *In re Aldrich*, 398 F.2d 855, 158 USPQ 311 (CCPA 1968)." The opinion went on to describe, and resolve, some of the logical difficulties in reaching a decision on whether there is or is not what has come to be known consistently as "obviousness-type double patenting," the ground of rejection now before us.

Should there be any doubt about the true ground of rejection before us in view of the board's stated preference for the term "improper extension of monopoly" instead of "obviousness-type double patenting," we observe that the brief of the PTO Solicitor states the issue to be whether the board was correct in rejecting the claim "on the ground of double patenting of the obviousness type." In the summary of argument is the statement: "Claim 4 [of Kaplan] and its supporting disclosure render the subject matter of the appealed claim obvious." In the argument proper, the brief says the main disagreement between appellants and

the board "appears to be the interpretation of the so-called 'second analysis question' discussed in *In re Vogel*," and that is the obviousness-type double patenting question, which we quoted above.

We will say a word about the board's desire to depart from the established terminology in the law of double patenting for the reason, quoted earlier, that "the improper extension of monopoly [i.e., of the patent right] occurs as a result of the same subject matter being claimed." The board's first opinion said it was adopting terminology from Judge Almond's opinion in *Thorington*, another CCPA case in which the court undertook to restate the law of double patenting. Reading Judge Almond's opinion will show that it recognizes two types of double patenting: same invention type and obviousness type, the main significance of the distinction being that filing a terminal disclaimer is permitted to cure an obviousness type situation but not a same invention type situation. (The fact that the board here demanded a terminal disclaimer as a condition for allowance of the claim is another indication of the true nature of its rejection.) It is also clear from Judge Almond's opinion that he was using "extension of monopoly type" as synonymous with obviousness type, merely as a way of distinguishing from same invention type double patenting.

The main reason why one cannot use "extension of monopoly" as a *type designation*, however, is that it cannot serve that purpose because the basis for *both* same invention and obviousness-type double patenting rejections is timewise extension of the patent right. All proper double patenting rejections, of either type, rest on the fact that a patent has been *issued* and later issuance of a second patent will continue protection, beyond the date of expira-

involved in this case." The opinion may be of interest, however, for what it has to say about "domination" and delay in the issuance of a second patent due to proceedings in the PTO. 784 F.2d at 356-357, 228 USPQ at 841.

4. For the latest decision of this court on the "same invention" double patenting issue see *Stu-diengesellschaft Kohle mbH v. Northern Petrochemical Co.*, 784 F.2d 351, 228 USPQ 837 (Fed. Cir.1986), a case in which it was expressly held that "obviousness-type double patenting is not

tion of the first patent, of the very same invention claimed therein (same invention type double patenting) or of a mere variation of that invention which would have been obvious to those of ordinary skill in the relevant art (obviousness-type double patenting). In the latter case, there must be some clear evidence to establish why the variation would have been obvious which can properly qualify as "prior art." Even if obviousness of the variation is predicated on the level of skill in the art, prior art evidence is needed to show what that level of skill was.

#### *Obvious Variation of what Kaplan Claims*

We turn now to consideration of the obviousness aspect of this obviousness-type double patenting rejection, which had to be based, of course, on what is *claimed* in the Kaplan patent. The board relied on Kaplan claim 4, which depends from claim 2, which depends from claim 1. These claims are set forth above. The board relied on the fact that claim 4 calls for "an organic solvent." The board did not say that the use of appellants' "solvent mixture of tetraglyme and sulfolane" would be obvious from claim 4. Indeed, in that portion of the board's opinion in which it reversed all of the examiner's rejections, the board held, on the record which contains appellants' declarations, that they, not Kaplan, invented the use of those mixed solvents, that appellants had antedated Kaplan as a reference under 35 U.S.C. § 102(e), that the Kaplan patent cannot be used to show obviousness under § 103, and that appellants' claim was not obvious from a cited patent to Pruett et al. It also reversed a rejection under §§ 102(g)/103 for obviousness which used Kaplan as the sole basis. Then it turned about and made an obviousness-type double patenting rejection based on Kaplan's claim 4. This rejection was predicated on the novel argument, particularly set out in the board's second opinion on rehearing, that Example 45 in Kaplan

(which is *appellants' invention*, disclosed in Kaplan's patent to conform with the best mode requirement of § 112) "provides some of the support for the term 'organic solvent' as used in claim 4 of the Kaplan patent."

Thus, after concluding that the Kaplan patent is not available to show obviousness of appellants' claimed process, the board has nevertheless used Kaplan to show obviousness in a double patenting context, for it relied on no other reference. Moreover, that part of the Kaplan disclosure used to do this is a description of appellants' joint invention. The board's claim-support theory does not suffice to justify this anomalous result. There is adequate support for the "organic solvent" limitation in claim 4 apart from appellants' specific *mixed* solvent invention, including the disclosure of the separate solvents in the mixture which are separately claimed by Kaplan. There is no way the board could have found appellants' claimed invention to be an obvious variation of what Kaplan claims except by treating the Kaplan patent disclosure as though it were prior art. This has repeatedly been held in our precedents to be impermissible. *In re Vogel*; *In re Aldrich*; *In re Boylan*, all supra. In effect, what the board did was to use a disclosure of appellants' own joint invention which had been incorporated in the Kaplan sole disclosure to show that their invention was but an obvious variation of Kaplan's claimed invention. That amounts to using an applicant's invention disclosure, which is not a 1-year time bar, as prior art against him. That is impermissible. D. Chisum, *Patents* § 3.08[2], § 5.03[3][f].

The PTO brief argues that *Vogel* sanctions such use of Kaplan's disclosure. We disagree. We do not find the factual situation here comparable to that in *Vogel*; neither was the reasoning of the board underlying the *Vogel* rejection comparable to the claim-supporting theory of the board in this case. Each double patenting rejection has to be decided on its own facts. *Vogel* dealt

IN RE KAPLAN

1581

Cite as 789 F.2d 1574 (Fed. Cir. 1986)

with one difficult-to-analyze situation, this case presents a different one. There being no double patenting, the requirement for a terminal disclaimer was improper.

*Summary*

REVERSED.

The double patenting rejection of appellants' single claim is *reversed* because the same invention is not being claimed, and because there is no proper evidence to show that the claim is for a mere obvious variation of what is claimed in the Kaplan patent relied on to support the rejection.

